

Pinus ponderosa / Carex inops ssp. heliophila Woodland

COMMON NAME	Ponderosa Pine / Sun Sedge Woodland
SYNONYM	Ponderosa Pine / Long-Stolon Sedge Woodland
PHYSIOGNOMIC CLASS	Woodland (II)
PHYSIOGNOMIC SUBCLASS	Evergreen woodland (II.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar needle-leaved evergreen woodland (II.A.4)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (II.A.4.N)
FORMATION	Rounded-crowned temperate or subpolar needle-leaved evergreen woodland (II.A.4.N.a.)
ALLIANCE	<i>Pinus ponderosa</i> Woodland Alliance
CLASSIFICATION CONFIDENCE LEVEL	1
USFWS WETLAND SYSTEM	Upland

RANGE

Globally

This community is found in Colorado, Wyoming, western South Dakota, and Montana.

Jewel Cave National Monument

In the study area, this community occurs most commonly west of the Monument and east of the Monument west of the Pass Creek Road. It is found at scattered sites elsewhere.

ENVIRONMENTAL DESCRIPTION

Globally

This community is often found on gentle and moderate south to west facing slopes (Hansen and Hoffman 1988, Hoffman and Alexander 1987).

Jewel Cave National Monument

This community occurs on gentle slopes (less than 10 degrees) often with southerly aspects.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i>
Herbaceous	<i>Carex inops</i> ssp. <i>heliophila</i> , <i>Danthonia spicata</i>

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<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i>
Subcanopy	<i>Pinus ponderosa</i>
Herbaceous	<i>Carex inops</i> ssp. <i>heliophila</i>

DIAGNOSTIC SPECIES

Globally

Pinus ponderosa, *Carex inops* ssp. *heliophila*

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Jewel Cave National Monument

Pinus ponderosa, *Carex inops* ssp. *heliophila*

VEGETATION DESCRIPTION

Globally

The tree canopy and subcanopy are dominated by *Pinus ponderosa*. *Juniperus scopulorum* and *Quercus macrocarpa* are occasionally found in the subcanopy. Shrubs are infrequent in this type. The herbaceous layer is dominated by *Carex inops* ssp. *heliophila* with inclusions of *Schizachyrium scoparium* and *Pseudoroegneria spicata* -- generally in areas with more open canopies.

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Stands of this vegetation type are dominated by *Pinus ponderosa*. Both canopy and subcanopy coverages typically are less than 25%. Short shrub canopy also typically is less than 25%, and commonly consists of one or more of the following species: *Physocarpus monogynous*, *Arctostaphylos uva-ursi*, *Symphoricarpos albus*, and *Amelanchier alnifolia*. Herbaceous cover usually is less than 25%. *Carex inops* ssp. *heliophila* occurs consistently but is not abundant.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G3

RANK JUSTIFICATION

DATABASE CODE CEGL000849

COMMENTS

Globally

The canopy in this type is usually moderately open but can become nearly closed in undisturbed stands (i.e., where the natural disturbance regime has been disrupted).

The stands used to document the *Pinus ponderosa* / *Carex inops* ssp. *heliophila* Habitat Type described by Hoffman and Alexander (1987) and Hansen and Hoffman (1988) had very high basal area and densities for a woodland, possibly due to their sampling procedure. The dense structure may have affected the floristic makeup of the stands. This type, however, is a woodland (not forest) type in its typically high-quality state.

Jewel Cave National Monument

This type often occurs in mosaics with other pine types, especially *Pinus ponderosa* / *Schizachyrium scoparium* Wooded Herbaceous Vegetation.

REFERENCES

Hansen, P. L. and G. R. Hoffman. 1988. The vegetation of the Grand River/Cedar River, Sioux, and Ashland Districts of the Custer National Forest: A habitat type classification. General Technical Report RM-157. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 68 p.

Hoffman, G. R. and R. R. Alexander. 1976. Forest vegetation of the Bighorn Mountains, Wyoming: A habitat type classification. Research Paper RM-170. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 38 p.

Hoffman, G. R. and R. R. Alexander. 1987. Forest vegetation of the Black Hills National Forest of South Dakota and Wyoming: A habitat type classification. Research Paper RM-276. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 48 p.

McAdams, A. G., D. A. Stutzman, and D. Faber-Langendoen. 1998. Black Hills Community Inventory, unpublished data. The Nature Conservancy, Midwest Regional Office, Minneapolis, MN.